# Cessna 182Q Checklist

## PREFLIGHT INSPECTION

### CABIN

1. Pitot Tube Cover – REMOVE, check opening for blockage
2. Documents (AROW) - AVAILABLE IN THE AIRPLANE
3. Parking Brake - SET
4. Control Wheel Lock - REMOVE
5. Ignition Switch - OFF
6. Master Switch - ON

**WARNING**

When turning on the master switch, using an external power source, or pulling the propeller through by hand, treat the propeller as if the ignition switch were on. Do not stand, nor allow anyone else to stand, within the arc of the propeller, since a loose or broken wire or a component malfunction could cause the propeller to rotate. Hand propped starts are prohibited by CAPR 60-1.

7. Fuel Quantity Indicators - CHECK QUANTITY
8. Low-Vacuum Warning Light - CHECK ON
9. Flaps – EXTEND
10. Pitot Heat – ON (Carefully check that pitot tube is warm to touch within 30 seconds)
11. Beacon, Nav, Stobe, Landing, Taxi, Pulse Lights - CHECK
12. Pitot Heat - OFF
13. Master Switch - OFF
14. Static Pressure Alternate Source Valve - OFF
15. Fuel Selector Valve - BOTH
16. Baggage Compartment – INVENTORY, SECURE CONTENTS Chocks, Pitot Tube Cover, Tow bar, Ladder, First Aid kit, Survival Kit, Fuel Sampler, Cleaning Materials, 1 QT Oil, Landing/Taxi Light Bulbs, Avionics Control Lock.
17. Baggage Door – CHECK (Lock with Key)

### EMPENNAGE

1. Rudder Gust Lock - REMOVE
2. Tail Tie-Down - DISCONNECT
3. Control Surfaces - CHECK freedom of movement and security

### RIGHT WING Trailing Edge

1. Aileron - CHECK freedom of movement and security
2. Flap – CHECK for security and condition

### RIGHT WING

1. Wing Tie-Down - DISCONNECT
2. Main Wheel Tire - CHECK for proper inflation
3. Fuel Tank Sump Drain Valve - DRAIN small amount, check for water, sediment and proper fuel grade
4. Fuel Quantity - CHECK VISUALLY for desired level
5. Drained Fuel – RETURN uncontaminated fuel to tank
6. Fuel Filler Cap - SECURE

### NOSE

1. Engine Oil Dipstick/Filler Cap - CHECK oil level, do not operate with less than 9 quarts. Fill to 12 quarts for extended flight
2. Fuel Strainer Drain Knob - PULL OUT for 4 seconds, check for water, sediment. CHECK Strainer Drain CLOSED
3. Propeller and spinner - CHECK for nicks, security, oil leaks
4. Landing Lights - CHECK for condition and cleanliness of covers
5. Carburetor Air Filter - CHECK for restrictions by dust
6. Nose wheel Strut and Tire - CHECK for proper inflation
7. Nose Tie Down - DISCONNECT
8. Static Source Openings (both sides of fuselage) - CHECK for blockage

**LEFT WING**

1. Fuel Tank Sump Drain Valve - DRAIN small amount, check for water, sediment and proper fuel grade
2. Fuel Quantity - CHECK VISUALLY for desired level
3. Drained Fuel – RETURN uncontaminated fuel to tank
4. Fuel Filler Cap - SECURE
5. Main Wheel Tire - CHECK for proper inflation

**LEFT WING Leading Edge**

1. Fuel Tank Vent Opening - CHECK for blockage
2. Stall Warning Vane - CHECK for freedom of movement while master switch is momentarily turned ON (horn should sound when vane is pushed upward).
3. Wing Tie-Down - DISCONNECT

**LEFT WING Trailing Edge**

1. Aileron - CHECK freedom of movement and security
2. Flap – CHECK for security and condition

**BEFORE STARTING ENGINE**

1. Preflight Inspection - COMPLETE
2. Passenger Briefing - COMPLETE
3. Seats, Belts, Shoulder Harnesses - ADJUST and LOCK
4. Brakes - TEST and SET
5. Radios, Autopilot, Electrical Equipment - OFF
6. Circuit Breakers - CHECK IN
7. Cowl Flaps – OPEN (move lever out of locking hole to reposition)
8. Fuel Selector Valve – BOTH
9. Rotating Beacon - ON

**STARTING ENGINE**

1. Prime - AS REQUIRED (2 to 6 strokes, none if engine is warm)
2. Carburetor Heat - COLD
3. Propeller – HIGH RPM
4. Throttle - OPEN 1/2 INCH
5. Mixture - RICH
6. Propeller Area - CLEAR
7. Master Switch - ON
8. Ignition Switch - START (RELEASE when engine starts)

**NOTE**

If engine has been overprimed, start with throttle 1/4 to 1/2 open. Reduce throttle to idle when engine fires.

9. Oil Pressure - CHECK
10. Starter - CHECK DISENGAGED
11. Navigation Lights - ON as required
12. Radios and Navigation Equipment - ON
13. Flaps - UP
14. Engine – LEAN for Taxi

**TAXI**

1. Brakes - CHECK
2. Nose Wheel Steering - CHECK
3. Cross Wind Controls - APPLY

**BEFORE TAKEOFF**

1. Parking Brake - SET
2. Seats, Seat Belts, Shoulder Harnesses - CHECK SECURE
3. Cabin Doors - CLOSED and LOCKED
4. Flight Controls - FREE and CORRECT
5. Flight Instruments – CHECK and SET
6. Fuel Quantity - CHECK
7. Primer - IN and Locked
8. Mixture - RICH

9. Fuel Selector Valve - RECHECK BOTH
10. Elevator and Rudder Trim - SET for Takeoff
11. Throttle - 1700 RPM
    a. Magnetos - CHECK (RPM drop should not exceed 150 RPM on either magneto or 50 RPM differential between magnetos)
    b. Propeller – CYCLE from high to low RPM, return to high RPM (full in).
    c. Carburetor Heat - CHECK for RPM drop
    d. Suction Gage – CHECK
    e. Engine Instruments and Ammeter - CHECK
12. Throttle - 1000 RPM or LESS
13. Throttle Friction Lock - ADJUST
14. Strobe Lights - AS DESIRED
15. Pulse Light - ON
16. Radios and Avionics - SET
17. Autopilot (if installed) – OFF
17. Transponder - ALT
18. Wing Flaps - SET for Takeoff
19. Brakes - RELEASE

**TAKEOFF**

**Normal Takeoff**

1. Wing Flaps - 0º - 20º
2. Carburetor Heat - COLD
3. Throttle - FULL OPEN and 2400 RPM
4. Elevator Control - LIFT NOSE WHEEL (at 50 KIAS)
5. Climb Speed – 70 KIAS (Flaps 20)
   - 80 KIAS (Flaps UP)

**Short Field Takeoff**

1. Wing Flaps - 20º
2. Carburetor Heat - COLD
3. Brakes - APPLY
4. Throttle - FULL OPEN and 2400 RPM
5. Mixture - RICH (Above 3000 feet, LEAN to obtain MAX RPM)
6. Brakes - RELEASE
7. Elevator Control - SLIGHTLY TAIL LOW
8. Climb Speed - 57 KIAS (Until all obstacles are cleared)
9. Wing Flaps – RETRACT slowly after reaching 70 KIAS

**ENROUTE CLIMB**

1. Airspeed - 85-95 KIAS
2. Power – 23 INCHES Hg and 2400 RPM
3. Fuel Selector Valve - BOTH
4. Mixture - RICH (mixture may be leaned above 5000 feet).
5. Cowl Flaps – OPEN as required

**CRUISE**

1. Power – 15 to 23 INCHES Hg, 2100-2400 RPM (no more than 75% is recommended)
2. Elevator and Rudder Trim - ADJUST
3. Mixture - LEAN
4. Cowl Flaps - CLOSED

**DESCENT**

1. Fuel Selector Valve - BOTH
2. Power - AS DESIRED
3. Mixture – ENRICHEN as required
4. Cowl Flaps - CLOSED
5. Carburetor Heat - FULL HEAT AS REQUIRED
6. Wing Flaps – AS DESIRED (0º – 10º below 140 KIAS, 10º – 40º below 95 KIAS)

**BEFORE LANDING**

1. Seats, Seat Belts, Shoulder Harnesses - SECURE
2. Fuel Selector Valve - BOTH
3. Undercarriage - CHECK
4. Mixture - RICH
5. Carburetor Heat - ON (apply full heat before reducing power)
6. Propeller – High RPM
7. Autopilot (if installed) - OFF

## LANDING

### Normal Landing

1. Airspeed - 70-80 KIAS (Flaps UP)
2. Wing Flaps - AS DESIRED (0º-10º below 140 KIAS, 10º-40º below 95 KIAS)
3. Airspeed – 60-70 KIAS (Flaps DOWN)
4. Trim - ADJUST
5. Touchdown - MAIN WHEELS FIRST
6. Landing Roll - LOWER NOSE WHEEL GENTLY
7. Braking - MINIMUM REQUIRED

### Short Field Landing

1. Airspeed – 70-80 KIAS (Flaps UP)
2. Wing Flaps - FULL DOWN (0º-10º below 140 KIAS, 10º-40º below 95 KIAS)
3. Airspeed - 60 KIAS
4. Trim - ADJUST
5. Power - REDUCE to Idle after clearing obstacle
6. Touchdown - MAIN WHEELS FIRST
7. Brakes - APPLY HEAVILY
8. Wing Flaps – RETRACT for maximum brake effectiveness

### Balked Landing

1. Power – FULL THROTTLE and 2400 RPM
2. Carburetor Heat - COLD
3. Wing Flaps - Retract to 20°
4. Climb Speed - 55 KIAS
5. Wing Flaps – RETRACT slowly after reaching 70 KIAS
6. Cowl Flaps - OPEN

## AFTER LANDING

1. Carburetor Heat - COLD
2. Wing Flaps - UP
3. Cowl Flaps - OPEN
4. Transponder - STBY
5. Nav, Strobe, Pulse Lights – AS REQUIRED
6. Engine – LEAN for Taxi

## SECURING AIRPLANE

1. Parking brake - SET
2. Radios, Electrical Equipment, Autopilot (if installed) - OFF
3. Throttle – 1000 RPM
4. Mixture - IDLE CUT-OFF (pull full out)
5. Throttle - IDLE
4. Ignition Switch - OFF
5. Master Switch - OFF
6. Fuel Selector Valve - RIGHT
7. Avionics Control Lock - INSTALL
8. Pitot Tube Cover - INSTALL
9. Aircraft Doors and Baggage Compartment – LOCK with Key

# EMERGENCY CHECKLIST

## ENGINE FAILURES

### ENGINE FAILURE DURING TAKEOFF ROLL

1. **THROTTLE - IDLE**
2. **BRAKES - APPLY**
3. Wing Flaps - RETRACT
4. Mixture - IDLE CUT-OFF
5. Ignition Switch - OFF
6. Master Switch - OFF

### ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. **AIRSPEED - 70 KIAS (FLAPS UP)**
   **65 KIAS (FLAPS DOWN)**
2. Mixture - IDLE CUT-OFF
3. Fuel Selector Valve - OFF
4. Ignition Switch - OFF
5. Wing Flaps - AS REQUIRED (40º recommended)
6. Master Switch - OFF

### ENGINE FAILURE DURING FLIGHT (RESTART PROCEDURES)

1. **AIRSPEED - 70 KIAS**
2. **CARBURETOR HEAT - ON**
3. **FUEL SELECTOR VALVE - BOTH**
4. Mixture – RICH
5. Ignition Switch - BOTH (or START if propeller is stopped)
6. Primer - IN and LOCKED

## FORCED LANDINGS

### EMERGENCY LANDING WITHOUT ENGINE POWER

1. AIRSPEED - 70 KIAS (Flaps UP)
   65 KIAS (Flaps DOWN)
2. Mixture - IDLE CUT-OFF
3. Fuel Selector Valve - OFF
4. Ignition Switch - OFF
5. Wing Flaps - AS REQUIRED (40° recommended)
6. Master Switch - OFF
7. Doors - UNLATCH PRIOR TO TOUCHDOWN
8. Touchdown - SLIGHTLY TAIL LOW
9. Brakes - APPLY HEAVILY

### PRECAUTIONARY LANDING WITH ENGINE POWER

1. Wing Flaps - 20°
2. Airspeed - 65 KIAS
3. Selected Field - FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
4. Radios and Electrical Switches - OFF
5. Wing Flaps - 40° (on final approach)
6. Airspeed - 65 KIAS
7. Master Switch - OFF
8. Doors - UNLATCH PRIOR TO TOUCHDOWN
9. Touchdown - SLIGHTLY TAIL LOW
10. Ignition Switch - OFF
11. Brakes - APPLY HEAVILY

### DITCHING

1. Radio - TRANSMIT MAYDAY on 121.5, giving location and intentions and SQUAWK 7700
2. Heavy Objects (in baggage area) - SECURE or JETTISON
3. Approach - High Winds, Heavy Seas - INTO THE WIND
   Light Winds, Heavy Swells - PARALLEL TO SWELLS

4. Wing Flaps - 20° to 40°
5. Power - ESTABLISH 300 FT/MIN DESCENT AT 60 KIAS

**NOTE**

If no power is available, approach at 70 KIAS with flaps up or at 65 KIAS with 10° Flaps

6. Cabin Doors - UNLATCH
7. Touchdown - LEVEL ATTITUDE AT ESTABLISHED RATE OF DESCENT
8. Face - CUSHION at touchdown with folded coat
9. Airplane - EVACUATE through cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened
10. Life Vests and Raft - INFLATE

# FIRES

## DURING START ON GROUND

1. **CRANKING - CONTINUE** to get a start which would suck the flames and accumulated fuel through the carburetor and into the engine.

If the engine starts:

2. Power - 1700 RPM for a few minutes
3. Engine - SHUTDOWN and inspect for damage

If engine fails to start:

4. **THROTTLE - FULL OPEN**
5. **MIXTURE - IDLE CUT-OFF**
6. **CRANKING - CONTINUE**
7. Fire Extinguisher - OBTAIN (have ground attendants obtain if not installed)
8. Engine - SECURE
   a. Master Switch - OFF
   b. Ignition Switch - OFF
   c. **FUEL SELECTOR VALVE - OFF**
9. Fire - EXTINGUISH using fire extinguisher, wool blanket, or dirt
10. Fire Damage - INSPECT

## ENGINE FIRE IN FLIGHT

1. **MIXTURE - IDLE CUT-OFF**
2. **FUEL SELECTOR VALVE - OFF**
3. **MASTER SWITCH - OFF**
4. Cabin Heat and Air - OFF (except overhead vents)
5. Airspeed - 100 KIAS (If fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture)
6. Forced Landing - EXECUTE (as described in Emergency Landing Without Engine Power)

## ELECTRICAL FIRE IN FLIGHT

1. **MASTER SWITCH - OFF**
2. **VENTS/CABIN AIR/HEAT - CLOSED**
3. **FIRE EXTINGUISHER – ACTIVATE**

**WARNING**

After discharging an extinguisher within a closed cabin, ventilate the cabin

4. All Other Switches (except ignition switch) - OFF

If fire appears out and electrical power is necessary for continuance of flight:

5. Master Switch - ON
6. Circuit Breakers - CHECK for faulty circuit, do not reset
7. Radio/Electrical Switches - ON one at a time, with delay after each until short circuit is localized
8. Vents/Cabin Air/Heat – OPEN when it is ascertained that the fire is completely extinguished

**CABIN FIRE**

1. **MASTER SWITCH - OFF**
2. **VENTS/CABIN AIR/HEAT - CLOSED**
3. **FIRE EXTINGUISHER - ACTIVATE**

**WARNING**

After discharging an extinguisher within a closed cabin, ventilate the cabin

4. Land the airplane as soon as possible to inspect for damage

**WING FIRE**

1. **LANDING/TAXI/PULSE LIGHT SWITCHES - OFF**
2. **PITOT HEAT SWITCH - OFF**
3. **NAVIGATION LIGHT SWITCH - OFF**
4. **STROBE LIGHT SWITCH - OFF**

**NOTE**

Perform a sideslip to keep the flames away from the fuel tank and cabin, and land as soon as possible using flaps only as required for final approach and touchdown

# ICING

**INADVERTENT ICING ENCOUNTER**

1. **TURN PITOT HEAT SWITCH ON**
2. **TURN BACK OR CHANGE ALTITUDE** to obtain an outside air temperature that is less conducive to icing
3. **PULL CABIN HEAT CONTROL FULL OUT AND OPEN DEFROSTER OULETS** to obtain maximum windshield defroster airflow. Adjust cabin air control to get maximum defroster heat and airflow
4. Open the throttle to increase engine speed and minimize ice build-up on propeller blades
5. Watch for signs of carburetor air filter ice and apply carburetor heat as required. An unexplained loss in engine speed could be caused by carburetor ice or air intake filter ice. Lean the mixture for maximum RPM, if carburetor heat is used continuously
6. Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable “off airport” landing site
7. With an ice accumulation of 1/4 inch or more on the wing leading edges, be prepared for significantly higher stall speed
8. Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness
9. Open left window and, if practical, scrape ice from the portion of the windshield for visibility in the landing approach
10. Perform a landing approach using a forward slip, if necessary, for improved visibility
11. Approach at 80 to 90 KIAS depending upon the amount of the accumulation
12. Perform a landing in level attitude

**STATIC SOURCE BLOCKAGE**
**(Erroneous Instrument Reading Suspected)**

1. **STATIC PRESSURE ALTERNATE SOURCE VALVE - PULL ON**

**NOTE**

In an emergency on airplanes not equipped with an alternate static source, cabin pressure can be supplied to the static pressure instruments by breaking the glass on the face of the vertical speed indicator

2. Airspeed - Consult appropriate calibration tables in section 5
3. Altitude – Cruise 50 feet higher and approach 30 feet higher than normal.

# LANDING WITH A FLAT MAIN TIRE

1. Approach - NORMAL
2. Wing Flaps – FULL DOWN
2. Touchdown - GOOD TIRE FIRST, hold airplane off flat tire as long as possible with aileron control

# ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS

### AMMETER SHOWS EXCESSIVE RATE OF CHARGE (Full Scale Deflection)

1. Alternator - OFF
2. Alternator Circuit Breaker - PULL
3. Nonessential Radio and Electrical Equipment - OFF
4. Flight - TERMINATE as soon as practical

### OVER-VOLTAGE LIGHT ILLUMINATES DURING FLIGHT

1. Master Switch - OFF (both sides)
2. Master Switch - ON Alternator
3. Over-Voltage Light - OFF

If Over-Voltage Light illuminates again:

4. Nonessential Radio and Electrical Equipment - OFF
5. Flight - TERMINATE as soon as practical